# TIMBER SALE REPORT AND APPRAISAL SUMMARY

# BOOMERANG SALVAGE TIMBER SALE

Prepared by:		Date:
1 ,	Milo Medina, Natural Resource Specialist Conejos Peak Ranger District	
I certify that this sale	meets requirements of the Secretary of Agric	culture's Regulation 36 CFR 223.30
	act Ranger, Conejos Peak RD	Date:

This page is supposed to be blank.

# I. SUMMARY OF RECOMMENDATIONS

Advertised as Scaled Sale

		4510 GGE
DEAD AND LIVE SAWTIMBER	All conifer species	4718 CCF
	Total	4718 CCF
	,	
REQUIRED DEPOSITS		
	Road Maintenance	\$6.97/CCF
	Surface Rock Replacement	\$1.31/CCF
	Slash Deposit	\$0.91/CCF
	Reconstruction Eng.	
TOTAL SALE VALUE	\$45.89	\$23,590.00
ADVERTISED VALUE	By Species and Product	
LIVE AND DEAD SAWTIMBER	ES	\$5.00/CCF
APPRAISAL BULLETIN NO		BU230213
Support Information		
	Normal Operating Season	6/15 - 10/31
	Fire Liability	\$1500.00
	Termination Date	7/01/2016
	Method of Bidding	Sealed Bid
	Escalated	Yes
	Bid Guarantee	\$2,400.00
	Minimum Performance Bond	\$3,000.00

This sale complies with Section 6(g), 3(e) - (f) of the National Forest Management Act of 1976, (36 CFR 233.3), the (revised) Rio Grande National Forest Land and Resource Plan (approved 11/7/96), and the County Line Vegetation Management Project Record of Decision and Summary.

## **II.** DESCRIPTION OF SALE AREA

#### A. Location

This sale is found within compartments 100308 and 100309 on the Conejos Peak Ranger District of the Rio Grande National Forest. The legal description is: all or portions of sections 35 of T.33N, R.4E, and all or portions of sections 2 of T.32N, R4E in the NMPM and all in Conejos County, Colorado. Access from Antonito Colorado is: south on U.S. Highway 17 for about 28 miles to its junction with NFSR 118 (Trujillo Meadows Rd). Take NFSR 118 west for 1.8 miles to its junction with NFSR 118.1C. Take NFSR 118.1C approximately 4 miles north to a gated intersection with 118.1E. Follow 118.1E for approximately 1.5 miles to units C.

## B. Acreage and Volume Data

This sale is comprised of 1 cutting unit totaling approximately 143.48 net acres, on National Forest land. This sale was cruised using point count measure variable plots. The unit was part of the Escarabajo Salvage Timber sale which was part of the original Spruce Park Sale. However the original Spruce Park sale was broken in to the Spruce Park and Escarabajo timber sales. The Escarabajo timber sale was mutual canceled between Mountain Valley Lumber Co. and the US Forest Service. Unit C comprises the Boomerang sale. The cruise was designed to scale sale standards to stay below a combined sampling error of + or - 30% with an estimated sale value over \$20,000. The actual cruise error was 28.23% for all volume. This does meet Regional and WO handbook standards in WO amendments 2409.12 –2000-2.

Included timber to be harvested: Live and Dead Engelmann spruce.

#### C. Land Status

National Forest land.

## D. Basis for Selecting the Area

This area was identified for harvest to salvage beetle infested trees as a result of favorable spruce beetle conditions. The area lies within Forest Products Management area prescription 5.13 of the revised Rio Grande National Forest Land and Resource Management Plan. For further information, please refer to the County Line Vegetation Management Project Record of Decision and Summary.

## E. Relationship to Other Uses

See the County Line Vegetation Management Project Record of Decision and Summary.

## F. Mitigation Measures

Design criteria identified in the County Line Vegetation Management Project Record of Decision and Summary and specialist reports specific for this sale are highlighted here.

#### Wildlife/TES

- Trees with known active bird nests will not be marked for removal. No trees with active birds nests were marked for removal – see silvicultural prescriptions/marking guides and marking inspections.
- All soft snags will be retained unless they present a safety hazard. *Per the silvicultural prescriptions/ marking guides, no soft snags were marked for removal.*
- o In the 5.13 forest products management prescription area:
  - at a minimum, retain two live trees per acre in the preventative thinning units (calculated as per acre averages at the stand level) to replace each snag. Retain live trees that are broken at the top, have mechanical damage or genetic defect, to replace snags, in the sanitation/salvage areas, retain all live trees except trees removed for operational purposes, *Where present, all live trees were marked for retention*.

maintain a minimum of two snags per acre (calculated as per acre averages at the stand level), *This was met and exceeded based on scenic resource criteria.* 

retain snags in various conditions of decay and distribution, *See silvicultural prescriptions/markings guides. Only class 1 and 2 trees were marked.* 

- select snags with a larger-than-average diameter for the stand. *See silvicultural prescriptions/markings guides. Only class 1 and 2 trees were marked.*
- Leave large woody debris (15-20 tons per acre) on harvested or thinned sites to help retain
  moisture, trap soil movement, provide microsites for establishment of forbs, grasses, shrubs and
  trees, and to provide habitat for wildlife. This is expected to be exceeded by dead material and
  slash left on site.
- o In sanitation/salvage units, lop and scatter slash to within 2 feet of the ground. If whole tree harvesting is used, return tops and limbs to the site for nutrient recycling and to provide microsites for seedling protection. Retain large woody debris by methods such as directional falling and leaving limbs, tops not a source of contagion for bark beetles, on site, and do not compact. Special provision C6.7# is included in the contract and identifies how slash will be treated.
- No harvest activities will occur within 300 feet of known boreal toad breeding sites. *No known boreal toad breeding sites were located during field surveys by district biologists.*
- o If a denning lynx or wolverine is identified, the den will be protected from disturbance during denning period and adverse habitat modification in a buffer around den site. Extent of buffer will be based on proposed management activities, species, topography, vegetative cover, and other site specific factors in consultation with the USFWS. *Special provision BT6.24 SITE SPECIFIC SPECIAL PROTECTION MEASURES.* (4/04) is included in the contract.
- o Effects to understory vegetation will be minimized to benefit lynx by identifying skid trail locations (and avoiding areas of densest understory), spacing skid trails at least 100 feet apart. To restrict damage to

residual stand, tractor skid trails shall not impact more than 15% of the harvested area. *Special provision C6.42# - SKIDDING AND YARDING (SPECIAL OBJECTIVES).* (11/98) is included in the contract.

- A minimum amount of damage to residual trees less than 8" DBH from the logging operation is expected. However this damage shall not exceed 25 percent of the total amount of the trees. Residual trees are protected under Standard provision B2.13.
- Big game hiding cover will be provided along sections of open road that are not adjacent to steep slopes or limited entry riparian areas that may already provide security habitat for deer and elk. Vegetative cover will be designated as needed on a site-specific basis to provide big game hiding cover within 200 feet of an open road where topography or other features do not provide security habitat. The unit in this sale is behind locked gates. Special Provision C5.41# CLOSURE TO USE BY OTHERS. (4/04) will be included in the contract.
- O The project area has been surveyed for TES and migratory bird species, with a particular emphasis on nest and den sites. This will continue to occur during project implementation. If species or sites are found they will be protected as indicated in the Forest Plan with consultation with the U. S. Fish and Wildlife Service, as necessary. *This objective will be accomplished through contract administration and specialist project monitoring.*

## **Timber Resources**

- O In all stands that exceed 50 percent removal of overstory spruce, reforestation surveys will be conducted, and if the survey indicates that Forest Plan stocking standards will not be met, these stands will be artificially reforested with Engelmann spruce seedlings to meet or exceed Forest Plan standards. Reforestation surveys and planting if needed will be included in the Sale Area Improvement Plan.
- When tractor skidding is used, logs shall be skidded with the leading end free of the ground to reduce ground disturbance. Special provision C6.42# SKIDDING AND YARDING (SPECIAL OBJECTIVES). (11/98) is included in the contract.
- To reduce beetle habitat, large green or infested (6 inch or larger diameter and 6 foot or more in length unmerchantable material) will be yarded to specified locations and decked for treatment within one year of decking. This objective will be accomplished through C6.7# SLASH TREATMENT.

#### Fire and Fuels

• Operations created fuels (logging slash) within 100 feet of private land boundaries will be removed from the site to be scattered and/or piled as directed by the Timber Sale Administrator. *Does not apply to this sale. No private boundary adjacent to sale.* 

## **Aquatic Resources**

- o There will be a 100 foot no-cut buffer on both sides of all stream channels, including the crenulated network, in the sanitation/salvage units. *No trees within 100 feet of all stream channels will be taken. The SMZ provision was used. See silvicultural prescriptions/marking guides and marking inspections.*
- Minimize disturbance during work on existing roads to limit exposure and placement of fresh sediment in ditches that could enter stream courses. Prevent sediment loss from roads by the adding gravel to the road surface where conditions warrant. All road work was completed through the mutually-cancelled Escarabajo Salvage TS.
- Existing roads will be evaluated to identify erosion and sediment problems so they can be fixed as part of road maintenance and reconstruction operations. Install additional cross drains where needed to divert road drainage into buffer strips and minimize road drainage into stream channels. Areas needing erosion and sediment control improvements have been identified in the specified road package and road maintenance costs and included in Special provision C5.31#-ROAD MAINTENANCE REQUIREMENTS. (7/01).
- O During road and temporary road construction and reconstruction, direct road drainage into filter strips. Limit sediment from road segments that cannot be directed to adequate filter strips by installing timber slash windrows, silt fence, and small sediment detention basins at the toe of road fill slopes and below ditch relief culverts. Areas needing erosion and sediment control improvements have been identified in the specified road package and road maintenance costs and included in Special provision C5.31# ROAD MAINTENANCE REQUIREMENTS. (7/01).

#### **Soils**

- O Subsoiling would be done after the sale units are completed on main skid trails, landings, roads where no immediate short term needs have been identified, or other areas having excess compaction. Subsoiled areas will then be planted to trees or native grass species for long-term soil and forest health. *This is included in the Sale Area Improvement Plan*.
- Keep at least 50% of the fine slash (< 3 inch diameter) in the forest stand as directed by the Forest Plan throughout the harvest units. The only exception is along private lands where no operational slash is allowed within 100 feet of the boundary. The materials should be well distributed throughout the stand and may be deposited on skid trails. Tops are preferred due to the high nutrient content of the leaves and small branches. Tops and limbs will be left in the harvest units. If purchaser selects to mechanical harvest, tops will be returned to the harvest units under Special provision.</p>
- During road reconstruction or road maintenance, surface water should not be re-directed away from its current location unless it would improve watershed or slope stability. See specified road package.
- Wet weather operations will be closely monitored and if soils become excessively wet (as
  defined in Forest Plan standards as exceeding the plastic limit), then operations will be

- suspended until such time as soils become operable again. This objective will be accomplished through provision B6.6-Erosion Prevention and Control.
- Road locations shall be reviewed for soil concerns prior to implementation. If any sensitive soil areas are encountered during project layout, site-specific mitigation would be developed. B6.6 Erosion Prevention Control..

# Recreation/ Travel Management

- O Post caution signs at key intersections along haul routes to alert the public to logging traffic and post caution signs in strategic locations along the Continental Divide National Scenic Trail during active logging operations for safety. Road signs are included in B6.33 and can be seen on the sale area map. The Continental Divide National Scenic Trail is not in close proximaty to this sale therefore no signs will be needed.
- o Designate the Continental Divide National Scenic Trail and ski yurt as protected improvements on the Sale Area Map. *Does not apply to this sale*.
- o Reconstruct any portion of the Continental Divide National Scenic Trail that becomes damaged as a result of logging activity (See Appendix A, Map 12). *Does not apply to this sale.*
- Notify the public of logging activity through media such as local newspapers and the Forest website. *This is a Forest responsibility*.
- Logging operations will not be permitted from December 15 to April 1 to reduce potential conflicts with winter recreation activities. Normal operating season will be June 15 –October 31. C6.312# restricts operations from 12/16 to 4/01.
- o Logging is only permitted from September 15 to December 15 within 250 feet of the Continental Divide Trail (See Appendix A, Maps 9 and 12). *Does not apply to this sale.*

#### **Noxious Weeds**

- The timber purchaser will be required to clean all logging and construction equipment prior to entry to the project area. *Covered in B6.35*.
- Haul routes and highly disturbed areas, such as landings, will be treated for noxious weed infestations during and after tree removal for five consecutive growing seasons. *Included in Sale Area Improvement Plan*.
- Biological control measures will be included as a tool for control of noxious weeds. This method
  will primarily be applied along stream courses and other permanent water sources. Forest
  Service responsibility.
- o All organic material used for rehabilitation: seed, straw, erosion control material, etc., will be certified weed free. *Included in C6.602#*.

o Road material brought in off site will come from borrow sources free of State Listed Noxious Weeds. Forest Service personnel will inspect and approve the borrow source locations prior to materials being hauled to the project area. *All road work was completed under the mutually-cancelled Escarabajo Salvage TS*.

## **III.** CONDITION OF SALE

## A. Planned Cutting Methods

The harvest system for this sale is salvage.

## B. Regeneration and Sale Area Betterment

All of the area treated will need to be planted per silvicultural prescriptions. All KV funds collected will be applied toward reforestation. RTRT funding may be required as well to achieve reforestation objectives.

#### C. Slash Treatment

C6.7#, states how slash will be treated in this sale.

#### **D.** Erosion Control

Provisions C6.601# and C6.602# are in the contract.

### E. Specified New Road Construction & Road Reconstruction

This purchaser will have to share maintenance responsibilities with other purchasers.

## IV. APPRAISAL PREMISE

## **A.** Volume Compilation

A summary of the volume determination is attached.

## **B.** Plan of Operation

Three full operating seasons, are assumed adequate to complete this sale.

## C. Appraisal Point

Montrose, Colorado, is used as the nearest advantageous point to the government having manufacturing facilities available to handle conifer species of this size and type of sale. The mill has reported that it can handle 20 mmbf per year, and can produce the end product for this sale (lumber).

## D. Adjustments

Adjustments were made for deteriorating live timber and for dead volume. Calculations are in Appendix G.

There were other adjustments considered. An adjustment for low stumps was not used because most stumps will be 20-24 inches and mechanical harvesting can be used in the area. An adjustment for additional slash requirements was not included because we expect very little material to be yum yarded.

There were other adjustments considered. An adjustment for Hauling and Logging Fuel costs were added. See Appendix J for calculation specifics.

#### V. APPRAISAL SUMMARIES

See the attached 2400-17 Appraisal Summary. Appraisal Bulletin used for this appraisal = BU230113

#### VII. VOLUME & COST CALCULATIONS

Sale Volume Summary - Appendix A

Sale Unit Volume Summary – Appendix B

Road Maintenance Cost – Appendix C

Haul Cost – Appendix D

Temporary Road Calculation – Appendix E

Average Skid Calculation – Appendix F

Unusual Adjustment Calculation – Appendix G

Performance Bond Calculation – Appendix H

Bid Guarantee – Appendix H

Fire Liability (AT15) – Appendix H

Slash Costs – Appendix I

K-V Costs – Appendix J

Salvage Sale Fund Costs – Appendix K

Live and Dead Calculations – Appendix L

**Load Count Calculations** 

Cruise Printout

2400-17 Report

Logging Plan and Map

Silvicultural Prescription

Cruise Design and Marking Guide

8/14/2006 E-Mail describing preferred handling of Subalpine Fir